

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-110 (Canceled)

111. (New) An isolated antibody comprising a complementarity determining region (CDR) of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.
112. (New) The isolated antibody of claim 111, wherein the CDR is:
- (i) a variable heavy (VH) CDR1 having the amino acid sequence of SEQ ID NO:26;
 - (ii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2;
 - (iii) a VH CDR3 having the amino acid sequence of SEQ ID NO:3;
 - (iv) a variable light (VL) CDR1 having the amino acid sequence of SEQ ID NO:62;
 - (v) a VL CDR2 having the amino acid sequence of SEQ ID NO:65; or
 - (vi) a VL CDR3 having the amino acid sequence of SEQ ID NO:20.
113. (New) The isolated antibody of claim 111, wherein the antibody comprises a VH domain.
114. (New) The isolated antibody of claim 111 or 113, wherein the antibody comprises a VL domain.
115. (New) An isolated antibody comprising two CDRs of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.
116. (New) The isolated antibody of claim 115, wherein the two CDRs are:

- (i) a VH CDR1 having the amino acid sequence of SEQ ID NO:26 and a VH CDR2 having the amino acid sequence of SEQ ID NO:2;
- (ii) a VH CDR1 having the amino acid sequence of SEQ ID NO:26 and a VH CDR3 having the amino acid sequence of SEQ ID NO:3;
- (iii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2 and a VH CDR3 having the amino acid sequence of SEQ ID NO:3;
- (iv) a VH CDR1 having the amino acid sequence of SEQ ID NO:26 and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (v) a VH CDR1 having the amino acid sequence of SEQ ID NO:26 and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (vi) a VH CDR1 having the amino acid sequence of SEQ ID NO:26 and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (vii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2 and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (viii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2 and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (ix) a VH CDR2 having the amino acid sequence of SEQ ID NO:2 and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (x) a VH CDR3 having the amino acid sequence of SEQ ID NO:3 and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (xi) a VH CDR3 having the amino acid sequence of SEQ ID NO:3 and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (xii) a VH CDR3 having the amino acid sequence of SEQ ID NO:3 and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (xiii) a VL CDR1 having the amino acid sequence of SEQ ID NO:62 and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (xiv) a VL CDR1 having the amino acid sequence of SEQ ID NO:62 and a VL CDR3 having the amino acid sequence of SEQ ID NO:20; or
- (xv) a VL CDR2 having the amino acid sequence of SEQ ID NO:65 and a VL CDR3 having the amino acid sequence of SEQ ID NO:20.

117. (New) The isolated antibody of claim 115, wherein the antibody comprises a VH domain.

118. (New) The isolated antibody of claim 115 or 117, wherein the antibody comprises a VL domain.

119. (New) An isolated antibody comprising three CDRs of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.

120. (New) The isolated antibody of claim 119, wherein the three CDRs are:

- (i) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (ii) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (iii) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (iv) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (v) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (vi) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (vii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR1 having the amino acid sequence of SEQ ID NO:62;
- (viii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;

- (ix) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (x) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VH CDR1 having the amino acid sequence of SEQ ID NO:26;
- (xi) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR1 having the amino acid sequence of SEQ ID NO:26;
- (xii) a VL CDR2 having the amino acid sequence of SEQ ID NO:65, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR1 having the amino acid sequence of SEQ ID NO:26;
- (xiii) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VH CDR2 having the amino acid sequence of SEQ ID NO:2;
- (xiv) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR2 having the amino acid sequence of SEQ ID NO:2;
- (xv) a VL CDR2 having the amino acid sequence of SEQ ID NO:65, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR2 having the amino acid sequence of SEQ ID NO:2;
- (xvi) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VH CDR3 having the amino acid sequence of SEQ ID NO:3;
- (xvii) a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR3 having the amino acid sequence of SEQ ID NO:3; or
- (xviii) a VL CDR2 having the amino acid sequence of SEQ ID NO:65, a VL CDR3 having the amino acid sequence of SEQ ID NO:20, and a VH CDR3 having the amino acid sequence of SEQ ID NO:3.

121. (New) The isolated antibody of claim 119, wherein the antibody comprises a VH domain.

122. (New) The isolated antibody of claim 119 or 121, wherein the antibody comprises a VL domain.

123. (New) An isolated antibody comprising four CDRs of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.

124. (New) The isolated antibody of claim 123, wherein the four CDRs are:

- (i) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VL CDR1 having the amino acid sequence of SEQ ID NO:62, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (ii) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VL CDR1 having the amino acid sequence of SEQ ID NO:62, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (iii) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (iv) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR1 having the amino acid sequence of SEQ ID NO:62, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (v) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR1 having the amino acid sequence of SEQ ID NO:62, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (vi) a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20;
- (vii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR1 having the

- amino acid sequence of SEQ ID NO:62, and a VL CDR2 having the amino acid sequence of SEQ ID NO:65;
- (viii) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR1 having the amino acid sequence of SEQ ID NO:62, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20; or
- (ix) a VH CDR2 having the amino acid sequence of SEQ ID NO:2, a VH CDR3 having the amino acid sequence of SEQ ID NO:3, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20.
125. (New) The isolated antibody of claim 123, wherein the antibody comprises a VH domain.
126. (New) The isolated antibody of claim 123 or 125, wherein the antibody comprises a VL domain.
127. (New) The isolated antibody of claim 111, 115, 119 or 123, wherein the antibody is a monoclonal antibody, a human antibody, a humanized antibody, chimeric antibody, single Fvs, an Fab fragment or an F(ab') fragment.
128. (New) An isolated antibody comprising a VH CDR1 having the amino acid sequence of SEQ ID NO:26, a VH CDR2 having the amino acid sequence of SEQ ID NO:2, and a VH CDR3 having the amino acid sequence of SEQ ID NO:3, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.
129. (New) The isolated antibody of claim 128 further comprising a VL CDR1 having the amino acid sequence of SEQ ID NO:62.
130. (New) The isolated antibody of claim 128 further comprising a VL CDR2 having the amino acid sequence of SEQ ID NO:65.
131. (New) The isolated antibody of claim 128 further comprising a VL CDR3 having the amino acid sequence of SEQ ID NO:20.

132. (New) The isolated antibody of claim 129 further comprising a VL CDR2 having the amino acid sequence of SEQ ID NO:65.

133. (New) The isolated antibody of claim 129 further comprising a VL CDR3 having the amino acid sequence of SEQ ID NO:20.

134. (New) The isolated antibody of claim 130 further comprising a VL CDR3 having the amino acid sequence of SEQ ID NO:20.

135. (New) An isolated antibody comprising a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.

136. (New) The isolated antibody of claim 135 further comprising a VH CDR1 having the amino acid sequence of SEQ ID NO:26.

137. (New) The isolated antibody of claim 135 further comprising a VH CDR2 having the amino acid sequence of SEQ ID NO:2.

138. (New) The isolated antibody of claim 135 further comprising a VH CDR3 having the amino acid sequence of SEQ ID NO:3.

139. (New) The isolated antibody of claim 136 further comprising a VH CDR2 having the amino acid sequence of SEQ ID NO:2.

140. (New) The isolated antibody of claim 136 further comprising a VH CDR3 having the amino acid sequence of SEQ ID NO:3.

141. (New) The isolated antibody of claim 137 further comprising a VH CDR3 having the amino acid sequence of SEQ ID NO:3.

142. (New) The isolated antibody of claim 128 further comprising a VL CDR1 having the amino acid sequence of SEQ ID NO:62, a VL CDR2 having the amino acid sequence of SEQ ID NO:65, and a VL CDR3 having the amino acid sequence of SEQ ID NO:20.

143. (New) An isolated antibody comprising the VH domain of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.

144. (New) An isolated antibody comprising the VL domain of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913, wherein the antibody immunospecifically binds to a human IL-9 polypeptide.

145. (New) The isolated antibody of claim 143 further comprising the VL domain of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913.

146. (New) The isolated antibody of claim 143, wherein the VH domain has the amino acid sequence of SEQ ID NO:27.

147. (New) The isolated antibody of claim 144 or 145, wherein the VL domain has the amino acid sequence of SEQ ID NO:28.

148. (New) The isolated antibody of claim 128, 135, 142, 143 or 144, wherein the antibody has an association rate constant or k_{on} rate of at least $10^5 \text{ M}^{-1}\text{s}^{-1}$.

149. (New) The isolated antibody of claim 128, 135, 142, 143 or 144, wherein the antibody has a dissociation rate constant or k_{off} of less than 10^{-5} s^{-1} .

150. (New) The isolated antibody of claim 128 further comprising a VL domain.

151. (New) The isolated antibody of claim 135 further comprising a VH domain.

152. (New) The isolated antibody of claim 128, 135, 142, 143, 144 or 145, wherein the antibody is a monoclonal antibody, a human antibody, a humanized antibody, chimeric antibody, single Fvs, an Fab fragment or an F(ab') fragment.

153. (New) The isolated antibody of claim 128 or 135, wherein the antibody is a single chain antibody or a single domain antibody.
154. (New) An isolated antibody which is encoded by the vector deposited as ATCC deposit No. PTA-5913.
155. (New) The isolated antibody of claim 128, 135, 142, 143, 144, 145 or 154, wherein the antibody is conjugated to a therapeutic or drug moiety.
156. (New) The isolated antibody of claim 128, 135, 142, 143, 144, 145 or 154, wherein the antibody is conjugated to a detectable substance.
157. (New) A pharmaceutical composition comprising the antibody of claim 128, 135, 142, 143, 144, 145 or 154 and a pharmaceutically acceptable carrier or excipient.
158. (New) The pharmaceutical composition of claim 157 formulated for pulmonary, intranasal, oral, subcutaneous, intradermal or parenteral administration.
159. (New) The pharmaceutical composition of claim 157 formulated for sustained release formulation.
160. (New) A lyophilized formulation comprising the antibody of claim 128, 135, 142, 143, 144, 145 or 154.
161. (New) A liquid formulation comprising the antibody of claim 128, 135, 142, 143, 144, 145 or 154.
162. (New) A kit comprising the antibody of claim 128, 135, 142, 143, 144, 145 or 154, in one or more containers, and instructions for use.
163. (New) An isolated antibody comprising a VH domain, wherein the antibody immunospecifically binds to a human IL-9 polypeptide and the VH domain comprises:

- (a) a VH CDR1 having the amino acid sequence of the VH CDR1 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions;
 - (b) a VH CDR2 having the amino acid sequence of the VH CDR2 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions; and
 - (c) a VH CDR3 having the amino acid sequence of the VH CDR3 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions.
164. (New) An isolated antibody comprising a VL domain, wherein the antibody immunospecifically binds to a human IL-9 polypeptide and the VL domain comprises:
- (a) a VL CDR1 having the amino acid sequence of the VL CDR1 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions;
 - (b) a VL CDR2 having the amino acid sequence of the VL CDR2 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions; and
 - (c) a VL CDR3 having the amino acid sequence of the VL CDR3 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions.
165. (New) The isolated antibody of claim 163 further comprising a VL domain.
166. (New) The isolated antibody of claim 164 further comprising a VH domain.
167. (New) The isolated antibody of claim 165, wherein the VL domain comprises:
- (a) a VL CDR1 having the amino acid sequence of the VL CDR1 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions;
 - (b) a VL CDR2 having the amino acid sequence of the VL CDR2 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions; and

- (c) a VL CDR3 having the amino acid sequence of the VL CDR3 of the antibody encoded by the vector deposited as ATCC deposit No. PTA-5913 with less than 4 amino acid substitutions.

168. (New) A composition comprising the antibody of claim 128, 135, 142, 143, 144, 145 or 154.